

IOWA HIGHWAY RESEARCH BOARD (IHRB)
Minutes of February 24, 2023

Regular Members Present

D. Skogerboe
D. Harness
C. Burke
R. Knoche
A. Bradley
D. Sanders
J. Thorius
A. Clemons
W. Rabenberg
M. Rydl
B. Skinner

Alternate Members Present

A. Buss
M. Cox
A. Kersten

Members with No Representation

T. Roll

Executive Secretary

V. Goetz

Administrative Assistant

T. Bailey

Visitors

| | |
|-----------------|-----------------------------------|
| Khyle Clute | Iowa Department of Transportation |
| Justin Dahlberg | Iowa State University |
| Behrouz Shafei | Iowa State University |
| Halil Ceylan | Iowa State University |
| Josh Opheim | WHKS & Co. |
| Chris Cromwell | Federal Highway Administration |

Agenda

Rudy Koester has been nominated for Vice Chair.

Jeff Devries stepped off the board and Daniel Harness is now our new member, Allen Karimpour is the new alternate.

Joel Fantz stepped off the board and Adam Clemons is now our new member; Brandon Billings is the new alternate.

Derek Snead is now our new member, Angela Kersten is the new alternate.

Motion to Approve by A. Clemons 2nd by A. Bradley
Motion carried with 14, 0, 0

2. Minutes Approval from the December 13, 2022 meeting

Motion to Approve by R. Knoche 2nd by W. Rabenberg

Motion carried with 14, 0, 0

3. TR-738 Final Report, "Shrinkage and Temperature Forces in Frame Piers", Behrouz Shafei, Iowa State University, \$150,000, (15 min)

Motion to Approve by A. Clemons 2nd by A. Buss

Motion carried with 14, 0, 0

4. TR-764 Final Report, "Use of Concrete Grinding Residue as a Soil Amendment", Halil Ceylan, Iowa State University, \$125,240, (15 min).

Motion to Approve by M. Rydl 2nd by B. Skinner

Motion carried with 14, 0, 0

5. Proposal IHRB-3874, "County Bridge Standards for Single Span Concrete Slabs – Final Design (Phrase 2)", Fouad K. Daoud, WHKS & Co., \$409,551.61, (15 min)

This project involves final design (Phase 2) for development of county bridge standards for Single Span Concrete Slab (SSCS) bridges. Previously completed Phase 1 included a literature review/survey, review of feasible span lengths and skews, widths, abutment types, and preliminary analysis/sizing as necessary to perform cost comparisons. Recommended bridge design criteria, implementation, and future research were presented in the final report. The Iowa Highway Research Board (IHRB) recommended proceeding with Phase 2 at the September 2022 meeting.

Motion to Approve by W. Rabenberg 2nd by A. Kersten

Motion carried with 14, 0, 0

6. IHRB Ideas – Summer Cycle July 1 October 30

Ideas Moving Forward towards Project Development:

- a. [Implementation of AASHTOWare BrR program for rating Iowa bridges \(#3851\)](#)
- b. [Develop and Field Test Non-Proprietary Ultra High-Performance Concrete for New Bridge Decks \(#3838\)](#)
- c. [Evaluation of RePLAY - Proprietary Bio-based Fog Sealer and Rejuvenator Reapplication in Clinton County \(#3848\)](#)
- d. [Evaluation of the Corrosion Performance of Sealers and Coatings applied on Bridge Substructures \(#3821\)](#)
- e. [Improved methodology to estimate wind loads on vertical poles and columns in transportation infrastructure \(#3833\)](#)

Ideas Cancelled

- f. [Development and Evaluation of Robust Moisture Control Strategies to Enhance the Long-Term Durability of Timber Highway Bridges \(#3815\)](#)
- g. [Advances in Mix Designs and Placement Procedures for Underwater Concrete \(#3805\)](#)

7. New Business

A formal Agreement has been signed for the Gravel Road Research Partnership with the Iowa Army National Guard at Camp Dodge. We are moving forward with our first Research project under this partnership, studying the Benefits of Aggressive Rehab on granular roads, taking place this summer at Camp Dodge. There are also some opportunities for us to partner with universities as we begin to develop more research efforts.

Serving as a State Transportation Innovation Council, every year we can utilize one hundred thousand dollars from the Federal Highway Administration towards the adoption of innovative technology. We prioritize the advancement of Every Day Counts (EDC) initiative and FHWA has rolled out EDC Seven. There was a summit last week regarding those technologies; IA FHWA division office will be working with their technical leads with each of the innovations and reaching out to DOT stakeholders on the implementation plan development. There is a campaign open for ideas for STIC projects to consider for this Federal Fiscal Year.

8. Adjourn

The next regular meeting of the Iowa Highway Research Board is scheduled for April 28, 2023 in the East/West Materials Conference Room at the Iowa DOT. The March 31 meeting was cancelled.

TB/VG